

1^LUKNOK OF HE ACTIONS ON TEMPEBATURE 57

of gas Nvhu'.h can bo obtained from 1 kilogramme must be di'ionuinod.

The ga,s contained per cubic metre, 0'279 cubic metre C02, which corresponds to a 0 content of 0'279x0'538— 015 kilo-grannno (ritl*1 Tables) ; and from 1 kilogramme C, therefore,

(-.'j ,. = (>•(>(> cubic metres gas will be obtained. The combustible value of the #IH from 1 kilogramme 0 is thus 6*66 X 977 = 6,507 calories. The

olVicioncy of tho producer would therefore be

roughly reckomul at o! =B(V5 per cent., and therefore

actually higher than with pure air-gas production, and even Komtnvhat bettm: than with production of COa free producer gas. Herein, however, tho amount of heat which has been introduced into the, producer owing to the steam has not been taken into nec'.otmt.

In order to ho, able to do thin, the amount of steam must be fixed which 1 kilogramme C will decompose. From 1 kilo-gramwoC is produced G"H(> cubic metres gas containing 87'3 per cent. II , or "2*48 cubic metres II, which must be produced from ti'-lH cubic metres steam. This, however, weighs iMHXO'KOfil •-.. *2 kilogrannnoB.

Ilorofroni one, derives the

ilKAT HALAN<'K-SLIKKT F<>U STEAM-AIR (Us ("WITH, FORMATION OF PlJKK 00a).

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CumltUNTihif vitluci Jutmtiurt'd with «team 2 ;

T«»t ul

H,OH()

Tuktm from tlio Prudticor at Moment of

Calories.

(JomlmKtiblo valuo of gas . 6,507 SonHiblo boat «i' gaw 279 x 6-66 1,858 lu outlet gaH 2 x 600 . . 1^200

Total . . . 9,565

From thitt thoro are, an net free by the producer and returned ihwolo, to Im doduelod lHf> calories, thus leaving 9,880 calories,

and thti ofliciisucy becomes '^y^r ==:69"4 per ceni For com" jiarison tho ronulls found are not out together in Table D.